

REMARKS/ARGUMENTS

Claims 1-17 and 28-30 are pending in this application and stand rejected under 35 U.S.C. §102 (e) as allegedly being anticipated by U.S. Patent 6,282,538 ("Woods"). Applicants respectfully disagree and request reconsideration of the present application in light of the below recited remarks.

Interview Summary

Applicants' attorneys and the Examiner discussed the claims of the present application in relation to Woods in a telephonic interview on July 30, 2003. The following is Applicants' understanding of the substance of the interview:

1. Applicants argued that independent claims 1, 9, and 28 include a feature neither taught nor suggested by Woods, namely: "mapping [a] user query to one or more search concepts." The Examiner disagreed citing Woods (Col. 8, lines 50-61).
2. Applicants argued that dependent claims 3 and 12 include a feature neither taught nor suggested by Woods, namely: "popular search concepts . . . wherein their relative popularity can be used to display a list of the search concepts in order of their popularity." The Examiner agreed to reconsider and reevaluate the reference and the rejection in light of this argument.
3. Applicants argued that the invention logs the frequency with which a concept is repeated in queries over time, while the reference matches query phrases to phrases in a document. The Examiner disagreed citing Woods (Col. 7, lines 60-65).

Rejections Under 35 U.S.C. § 102(e)

Claims 1-17 and 28-30 stand rejected under 35 U.S.C. §102 (e) as allegedly being anticipated by Woods. Applicants respectfully disagree.

The present application discloses systems and methods for query refinement to enable improved searching based on identifying and utilizing popular concepts related to user's queries. More specifically there is disclosed:

“In a method of one embodiment, a query is received from a user, and then mapped to one or more search concepts. A list of search concepts associated with the query is then displayed. Alternatively or additionally, the search concepts associated with the query are used to provide a set of improved search results instead of being displayed. (Application, Summary of the invention).”

Woods discloses a method and apparatus for generating query responses in a computer based document retrieval system. “The method locates compact regions (“hit passages”) within a text that match a query to some measurable degree, such as by including terms that match terms in the query to some extent (“(entailing) term hits”), and ranks them by the measured degree of match (Woods, Summary of the Invention).”

Importantly, and in contrast to the claimed invention, Woods does not teach or suggest, “mapping [a] user query to one or more search concepts”, as recited by independent claims 1, 9, and 28 of the present invention. However, the Examiner cites Woods (Fig. 1, element 30; Col. 4, lines 26-35; Col. 8, lines 50-61) as teaching this limitation. Applicants respectfully submit that, *rather than matching a query to a search concept, Woods discloses matching a query to a hit passage*. A hit passage is not similar to a search concept. A hit passage is a portion of text within a document identified by a search and its relative proximity to similar text within the document (Col 6, lines 14-19). By contrast, a search concept is a pre-defined set of results for which a user may wish to search (Application, Paragraph 35). A concept may be “Ford”, whereas an actual search term and result may be “Mustang”, a model of car made by Ford (Application, Paragraph 36). Thus, the disclosure in Woods of hit passages does not anticipate or render obvious the claimed invention.

Furthermore, in contrast to the claimed invention, Woods does not teach or suggest, “displaying a list of the search concepts associated with the query”, as recited by independent claim 1 of the present invention. However, the Examiner cites Woods (Col. 4, lines 46-58) as teaching this limitation. Applicants respectfully submit that Woods (Col. 4, lines 46-58) discloses that a proximity buffer may be used to store variably sized regions of target

documents that include hit passages. Storing regions of text is not similar to displaying a list of search concepts.

Additionally, in contrast to the claimed invention, Woods does not teach or suggest, “using search concepts associated with the query to provide a set of improved search results”, as recited by independent claim 28 of the present invention. The Examiner does not state in the Office Action that Woods teaches or suggests this feature.

With respect to dependent claims 2 and 10, Woods does not teach or suggest, “initiating a preferred query associated with at least one of the one or more search concepts to provide improved search results”, as recited in the claims. However, the Examiner cites Woods (Col. 4, lines 36-45) as including this feature. Applicants respectfully submit that Woods (Col. 4, lines 36-45) merely discloses that a predetermined maximum number of hit passages may be stored in an output buffer. Storing hit passages in an output buffer is not similar to initiating a preferred query associated with a search concept.

With respect to dependent claims 3 and 12, Woods does not teach or suggest “popular search concepts and wherein their relative popularity can be used to display a list of the search concepts in order of their popularity”, as recited in the claims. However, the Examiner cites Woods (Fig. 4, step 12; Col. 6, lines 14-19) as including this feature. Applicants respectfully submit that Woods (Fig. 4, step 12; Col. 6, lines 14-19) merely discloses that a hit passage may be ranked based on the proximity of hit passage phrases that match query phrases. Ranking a hit passage based on a proximity of phrases is not similar to ranking a search concept based on its popularity, which is the frequency with which the concept is repeated in queries over time (Application, Summary of the invention).

During the interview, the Examiner cited Woods (Col. 7, lines 60-65) as teaching logging the frequency with which a concept is repeated in queries over time. Applicants respectfully submit that Woods (Col. 7, lines 60-65) merely discloses that a hit passage phrase may match a query phrase if the hit passage phrase has a semantic similarity to the query phrase. Determining a semantic similarity between phrases is not similar to logging the frequency with which a concept is repeated in queries over time.

Applicants respectfully submits that dependent claims 4-8, 11, 13-17, 29 and 30 are patentable at least by reason of their dependency. Accordingly, reconsideration and withdrawal of the 35 U.S.C. § 102(e) rejections are respectfully requested.


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PATENT

CONCLUSION

In view of the above remarks, Applicant respectfully submits that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested.

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